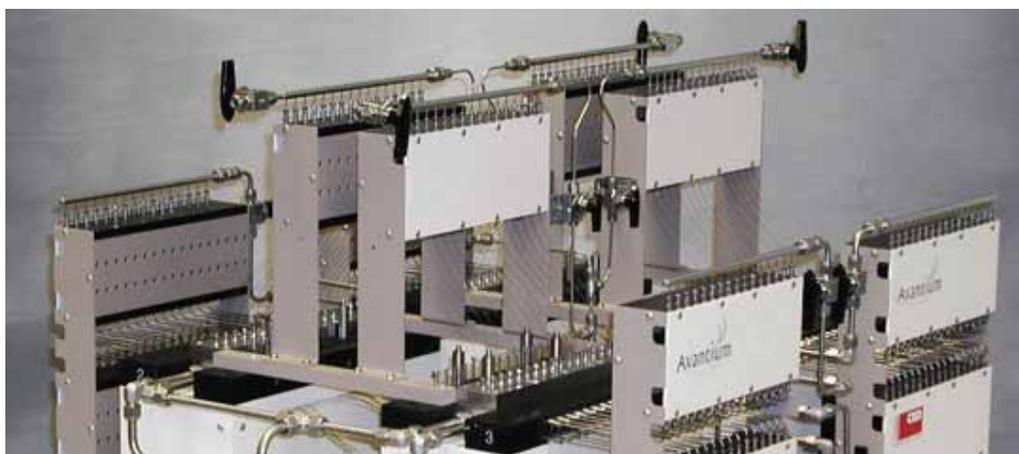


Salamander Electric Fixed Bed Reactors

For gas, liquid phase and trickle flow operations

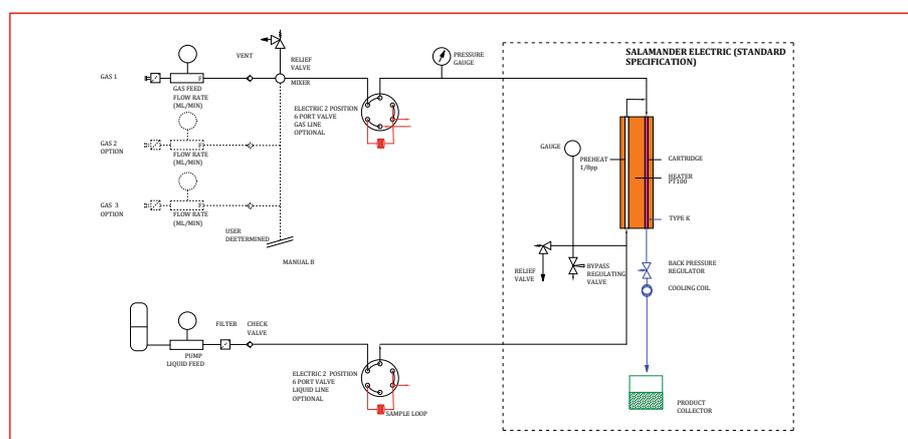


Salamander Electric Fixed Bed Reactors

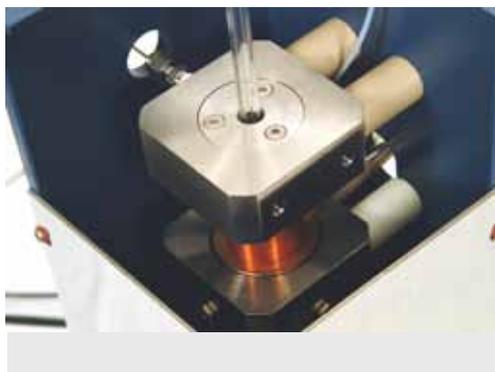
Cambridge Reactor Design has applied its twenty years of experience in high-pressure chemistry and easy to use software to develop systems for screening reactions and carrying out detailed kinetic studies both quickly and safely.

Users can screen new chemistries, identify new catalysts and optimise conditions on a small scale. Our systems are completely modular, suited for gas and liquid phase, as well as trickle flow operation. The system may be operated automatically by a computer that displays all the operations and process variables. It is possible to write methods to cover a range of process conditions, running in sequence. The addition of an inline sampling valve offers the opportunity for automated analysis and process control.

Cambridge Reactor Design provides a range of "off the shelf" fixed bed reactors which may be customised to obtain the desired customer results.



Fixed Bed Flow Reactors



Key features include:

- Pressures up to 200 bar
- Temperatures up to 900 C
- Glass, Stainless Steel or Hastelloy Reactors
- Customised tube geometry
- PID or Cascade temperature control options
- A wide range of liquid and gas feed options

Applications Examples

Selective oxidations

Metathesis

Selective hydrogenations

Aldol condensations

Fischer-Tropsch

Isomerisation¹

Exhaust emissions²

1. Catalytic isomerisation of but-1-ene to 2-methylpropene over solid acids: comparison between DAF-1 and other shape-selective magnesium-containing aluminophosphates and aluminosilicates
Srinivasan Natarajan, Paul A. Wright and John Meurig Thomas
J. Chem. Soc., Chem. Commun., 1861-1863, 1993

2. Kinetic modeling of CO oxidation on Pt/CeO₂ in a gradientless reactor
Mazen A. Shalabi¹, Bashir H. Harji, Christopher N. Kenney
Journal of Chemical Technology and Biotechnology, 65, 317-324, 1996



